Title (en)

METHOD FOR PROCESSING MATERIALS WITH LASER PULSES HAVING A LARGE SPECTRAL BANDWIDTH AND DEVICE FOR CARRYING OUT SAID METHOD

Title (de)

VERFAHREN ZUR MATERIALBEARBEITUNG MIT LASERIMPULSEN GROSSER SPEKTRALER BANDBREITE UND VORRICHTUNG ZUR DURCHF HRUNG DES VERFAH RENS

Title (fr)

PROCEDE DE TRAITEMENT DE MATERIAUX AU MOYEN D'IMPULSIONS LASER DE GRANDE LARGEUR DE BANDE SPECTRALE ET DISPOSITIF PERMETTANT DE METTRE EN OEUVRE CE PROCEDE

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Application

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Abstract (en)

[origin: WO2005009666A1] A method and device for processing materials with laser pulses having a large spectral bandwidth and a device for carrying out said method. The aim of the invention is to create an easy, flexible method enabling universally applicable processing which can, however, be adapted to specific processing and methodological requirements. According to the invention, one or several spectral parameters of the laser pulses, i.e. the spectral amplitude and/or spectral phase and/or spectral polarization thereof, is/are specifically modified, preferably according to a measuring process variable, in order to process material or during the occurrence of said processing. The invention is used in order to process material with laser pulses having a large spectral bandwidth, particularly femto-second pulses and pico-second pulses.

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